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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,365

05/15/2006

Min-won Kim

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EGBERT LAW OFFICES

412 MAIN STREET, 7TH FLOOR

HOUSTON, TX 77002

EXAMINER

MELLON, DAVID C

ART UNIT

PAPER NUMBER

4153

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/579,365	<b>Applicant(s)</b> KIM, MIN-WON	
	<b>Examiner</b> DAVID C. MELLON	<b>Art Unit</b> 4153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Drawings***

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See in specification [0002-0007]. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claim 1 is objected to because of the following informalities:

On line 15, the phrase "said filter body , fluid having passed" should be corrected with "said filter body, fluid having passed".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "filter body" in line 14. This recitation renders the claim indefinite because it is uncertain if this is a different filter body from that which has already been recited. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hunter et al. (USP 4,556,484).

Regarding claim 1, Hunter et al. discloses in figures 4 and 4a:

- a filter (118 - filter cartridge) for a water purifier (apparatus of figure 4), said water filter being comprised of
- a head (68 - cap, holds canister containing the filter and also has an inlet and outlet for water, see also C2/L30-54) defined by a
- guide passage (passage 200 for fluid to flow from the inlet), and
- an inlet port (70),
- an outlet port (72), and
- a filter body (118 – filter cartridge in canister 66) threadably locked (see threads 110 holding canister into the cap unit) to said head (68) and said guide passage into which the fluid flows through,

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- said guide passage being in communication with said inlet port (see passage 200 connected with inlet port 70) of said head, the fluid flowing therein, purified fluid being transferred to said outlet port (72) of said head, said filter comprising:
- fluid flow interruption means (182 – piston) comprising an elastic spring (178 - compression spring);
- a fluid flow interrupter disposed in said guide passage (see bore 170 attached to the end of passage 200) in communication with the inlet port (bore 170 is in communication with passage 200 which is in communication with inlet 70)
- having a guide rod formed at one end of said fluid flow interrupter (see piston 182), and
- an opening and closing body having a diameter decreasing in a downward direction (see piston 182 with post 174 forming the entirety of the opening and closing member, the diameter decreases downwards in the direction that the piston moves)
- around which an o-ring is fitted (162 – seal washer, a washer will have a bore through the center of it, thus it can be considered equivalent to an o-ring since it is acting as a seal washer) and
- forming an opening and closing projection from another end thereof (see post 174 which seats in aperture 190 of the head)
- said fluid flow interrupter controllably engaging opening and closing said guide passage by force of said elastic spring, said head and filter body being

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- coupled to and un-coupled from each other (see filter 118 in canister 66 with threads 110 that connects to cap 68, and the piston shuts aperture that 190 which allows fluid to enter into the filter unit thereby prohibiting fluid from being guided in passage 200 into the filter); and
- at least one through-hole on an upper end of said filter body (tube 119), fluid having passed through said guide passage in communication with inlet port flowing through said through-hole into said filter body,
  - wherein said guide passage has a hollow cylindrical protuberance formed at another end thereof (see material forming aperture 190 at the end of fluid passageway 200 and further increasing diameter bore 170 with piston receiving walls),
  - said hollow cylindrical protuberance having an inner diameter greater than an outer diameter of said fluid guide rod or said fluid flow interrupter (see that piston 182 and post 174 respectively fit into bore 170 and aperture 190 to close off flow),
  - said other end of said guide passage having an inner diameter gradually decreasing in a downward direction (see bore 170 having a diameter than follows piston 182 such that it decreases ultimately resulting in aperture 190),
  - said elastic spring having one end through which said fluid guide rod of said fluid flow interrupter is inserted (spring 178 attached to end of piston 182)
  - the other end of the spring is fitted around the hollow cylindrical protuberance (spring attached to aperture area 190).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunter et al. (USP 4,556,484) as applied to claim 1 above, and further in view of Nam et al. (US 2003/0042191).

Regarding claim 2, Hunter et al. discloses all of the claim limitations as set forth above. Hunter et al. further discloses in figure 2, that the filter unit can be mounted within a cabinet and the filter is removably attached. Hunter et al. is silent however as to a means for mounting the filter unit.

Nam et al. discloses a manifold for a replaceable fluid filter cartridge (Abstract) and in figure 1 shows a fixing unit (130) which attaches to circular plate (137) of the manifold and is then used to attach the device to a wall ([0043]).

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Hunter et al. and Nam et al. are combinable because they are both concerned with the same field of endeavor, namely that of water filter devices.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the water filter apparatus of Hunter et al. to include a mounting bracket to hold the head or manifold aspect of a filter unit to a wall as taught by Nam et al. for the purpose of allowing for the filter device to be securely installed into a location for usage.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID C. MELLON whose telephone number is (571)270-7074. The examiner can normally be reached on Monday through Thursday 7:00am-4:30pm EST, Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on (571)272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. C. M./  
Examiner, Art Unit 4153

/Basia Ridley/  
Supervisory Patent Examiner, Art Unit 4153